

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
18 August 2005 (18.08.2005)

PCT

(10) International Publication Number
WO 2005/075022 A2

- (51) International Patent Classification⁷: **A61P 9/00**, C12Q 1/28, 1/37, 1/68, G01N 33/68
- (21) International Application Number: PCT/US2005/003312
- (22) International Filing Date: 31 January 2005 (31.01.2005)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
- | | | |
|------------|------------------------------|----|
| 10/769,744 | 30 January 2004 (30.01.2004) | US |
| 10/769,542 | 30 January 2004 (30.01.2004) | US |
| 10/830,477 | 22 April 2004 (22.04.2004) | US |
| 10/829,674 | 22 April 2004 (22.04.2004) | US |
| 60/642,909 | 10 January 2005 (10.01.2005) | US |
- (71) Applicant (for all designated States except US): **DECODE GENETICS EHF**. [IS/IS]; Sturlugötu 8, IS-101 Reykjavik (IS).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **HELGADOTTIR, Anna** [IS/IS]; Hamravik 86, IS-112 Reykjavik (IS). **HAKONARSON, Hakon** [IS/IS]; Grjotasel 3, IS-109 Reykjavik (IS). **GULCHER, Jeffrey, R.** [US/US]; 25663 North Countryside Drive, Lake Barrington, IL 60010 (US). **GURNEY, Mark, E.** [US/US]; 910 Rosewood Avenue, SE, Grand Rapids, MI 49506 (US).
- (74) Agents: **SINTICH, Sharon, M.** et al.; Marshall, Gerstein & Borun LLP, 6300 Sears Tower, 233 South Wacker Drive, Chicago, IL 60606 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:**
— without international search report and to be republished upon receipt of that report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: SUSCEPTIBILITY GENE FOR MYOCARDIAL INFRACTION, STROKE, AND PAOD; METHODS OF TREATMENT

(57) Abstract: Linkage of myocardial infarction (MI) and a locus on chromosome 13q12 is disclosed. In particular, the FLAP gene within this locus is shown by genetic association analysis to be a susceptibility gene for MI and ACS, as well as stroke and PAOD. Pathway targeting for treatment and diagnostic applications in identifying those who are at risk of developing MI, ACS, stroke or PAOD, in particular are described. The invention also provides for compositions comprising a leukotriene synthesis inhibitor and a statin and methods of using these compositions to reduce C-reactive protein in a human subject at risk of MI, ACS, stroke and/or PAOD.



WO 2005/075022 A2